

SERIAL NO: 08/093,972

PATENT

the corresponding mRNA, and then, if necessary, their content of adenosine may be reduced by substituting one or more universal bases or adenosine analogues incapable of activating adenosine A₁, A_{2b} or A₃ receptors or which activate the adenosine A_{2b} receptor. Thus, in addition to "down-regulating" specific adenosine receptor genes, the present oligos have an increased effect when administered by either selection of genes, RNA and flanking regions that are devoid, or have a low [A] T/U content, or alternatively one or more of the adenosine(s) present in the antisense oligonucleotide(s) are substituted with other nucleotide bases, so called universal bases, which bind to thymidine (T) but lack the ability to activate adenosine receptors and otherwise may not activate adenosine receptors. Given that adenosine (A) is a nucleotide base complementary to thymidine (T) and uridine (U), when a T appears in the DNA or a U in the RNA target, the anti-sense oligo will have an A at the same position.

IN THE CLAIMS

Please delete claims 175 and 183, and amend the remaining claims as shown in the enclosures.

REMARKS

THE PENDING CLAIMS

Claims 108-131, 133-134, 146, 148, 151-156, 158-159, 161-173, 175, 178-181, 183-189, 191-193, 195-198 and 200-234 are pending in this case, claims 175 and 183 are being deleted, and various claims are being amended hereby. Accordingly, claims 108-131, 133-134, 146, 148, 151-156, 158-159, 161-173, 178-181, 184-189, 191-193, 195-198 and 200-234 remain pending.

THE SPECIFICATION

The present amendments are necessary due to typographical/clerical errors incurred at the time of filing at page 37 and original claim 89. From the context, it may be surmised that in order for an anti-sense oligonucleotide to have an adenosine (A) base at a specific site, the target nucleic acid must have at the site a thymidine (T) if it is DNA, or a uridine (U) if it is RNA.

Further support for these amendments may be found in the same paragraph bridging pages 37 and 38, in the definition of universal bases that are provided to be substituted for adenosine (A) in the anti-sense oligonucleotide. These universal bases are said to "bind to thymidine (T) but lack the ability to activate adenosine receptors and otherwise may not activate adenosine receptors."

The applicant requests consideration of the present amendments to the specification and